

CLAIMS

1.- Oil from seeds, said oil comprising:

an oleic acid content of more than 5% and less than 65% by weight based upon the total fatty acid content, a linoleic acid content of more than 1% and less than 65% by weight based upon the total fatty acid content, a palmitic acid content of more than 20% and less than 40% by weight based upon the total fatty acid content, a stearic acid content of more than 3% and less than 15% based upon the total fatty acid content, characterized in that the palmitoleic acid content is less than 4% based upon the total fatty acid content and the asclepic acid content is less than 4% based upon the total fatty acid content.

2.- Oil from seeds according to claim 1, characterized in that the palmitoleic acid content is less than 3% based upon the total fatty acid content.

3.- Oil from seeds according to claim 1, characterized in that the asclepic acid content is less than 2% based upon the total fatty acid content.

4.- Oil from seeds according to claim 1, characterized in that the oleic acid content is at least 40% by weight based upon the total fatty acid content.

5.- Oil from seeds according to claim 1, characterized in that the total level of saturated fatty acids is at least 24% by weight based upon the total fatty acid content.

6.- Oil from seeds according to claim 5, characterized in that the total level of saturated fatty acids is at least 35% by weight based upon the total fatty acids content.

7.- Oil from seeds according to claim 6, characterized in that the total level of saturated fatty acids is at least 45% by weight based upon the total fatty acids content.

8.- Oil from seeds according to claim 1, characterized in that the linoleic acid content is less than 18% by weight based upon the total fatty acids content.

9.- Oil from seeds according to claim 1, characterized in that the oil has less than 10% by weight of the saturated fatty acid groups in the 2 position of the triacylglycerol molecules of the oil.

10.- Oil from seeds according to claim 9, characterized in that the oil has a maximum of 5% of the saturated fatty acid groups in the 2 position of the triacylglycerol molecules of the oil.

11.- Oil from seeds according to claim 1, which oil is a sunflower oil.

12.- Oil from seeds according to claim 11, characterized in that the oil is extracted from sunflower seeds obtained by crossing sunflower seeds of the mutant sunflower line

IG-1297M deposited on 20 January 1998 with ATCC under deposit accession number ATCC-209591 with the mutant sunflower line CAS-3, deposited on 14 December 1994 with the ATCC under deposit accession number ATCC-75968.

13.- Sunflower seeds comprising a sunflower oil having:

an oleic acid content of more than 5% and less than 65% by weight based upon the total fatty acid content,

a linoleic acid content of more than 1% and less than 65% by weight based upon the total fatty acid content,

a palmitic acid content of more than 20% and less than 40% by weight based upon the total fatty acid content,

a stearic acid content of more than 3% and less than 15% based upon the total fatty acid content,

characterized in that the palmitoleic acid content is less than 4% based upon the total fatty acid content, and;

the asclepic acid content is less than 4% based upon the total fatty acid content.

14.- Sunflower seeds comprising a sunflower oil according to claim 2.

15.- Method for preparing sunflower seeds as claimed in 13, comprising the steps of:

a) crossing sunflower seeds of the mutant sunflower line IG-1297M deposited on 20 January 1998 with ATCC under deposit accession number ATCC-209591 with the mutant sunflower line CAS-3, deposited on 14 December 1994 with the ATCC under deposit accession number ATCC-75968.

b) self-pollinating F1 progeny plants of step a) for at least two generations to produce inbred plants.

c) selecting from the progeny of step b) plants with seeds containing an oil having a palmitic acid content of more than 20%, a palmitoleic acid content of less than 4% and an asclepic acid content of less than 3%.

d) collecting progeny seeds from step c) and optionally

e) repeating the cycle of culturing, selection and collection of seeds

16.- Method for preparing sunflower oil according to claim 1, by extracting sunflower seeds as claimed in claim 1.

17.- Use of oil according to claim 1 at high temperature conditions.

18.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute baking.

19.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute cooking.

20.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute roasting.

21.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute heating by any means at temperatures of at least 70°C.

22.- Use of oil in claim 1 in the production of edible fats or fat mixtures, such as margarine or vegetable-dairy.

23.- Use of oil in claim 1 in confectionery or bakery.

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